

Presentation date	Presenter Name	Title
12.13.21	Michael Todt	Baseline Balloon Stratospheric Aerosol Profiles (B ² SAP): Systematic stratospheric aerosol measurements working towards long-term datasets
12.14.21	James Churnside	Airborne lidar measurements of phytoplankton profiles in the Chukchi Sea
12.14.21	Colby Francoeur	Modeling Methane and Ozone Precursor Emissions from Oil and Gas Production Regions during SONGNEX
12.14.21	Ryuji Yoshida	A Parallelized-FIVE: Framework for improvement by Vertical Enhancement
12.14.21	Rebecca Schwantes	Evaluating and Improving Urban VOC Chemistry in Los Angeles using WRF-chem
12.14.21	Graham Feingold	Cloud field organization in trade-wind cumulus is intimately tied to precepitation efficiency
12.14.21	Pornampai Narenpitak	The Role of Large-Scale Vertical Motion in the Sugar-To-Flowers Trade Cumulus Transition (invited)
12.14.21	Michael Diamond	Aerosols & the Antartic: Underappreciated Drivers of Earth's Hemispheric Albedo Symmetry

12.14.21	Congmeng Lyu	Refining Ammonia Emissions Estimates with Satellite-based Observations Using a Novel Framework and an Air Quality Model
12.14.21	Michael Diamond	Deepening-warming or drizzle-depletion? An LES intercomparison of the subtropical stratocumulus-to-cumulus transition in the presence of smoke
12.14.21	Martin Breitenlechner	A Versatile vacuum Ultraviolet Ion Source for Low Pressure Bipolar Chemical Ionization Mass Spectrometry
12.14.21	Greg Frost	NOAA's Geostationary Extended Observations (GeoXO) Atmospheric Composition Capabilities
12.14.21	Bert Verreyken	Contrasting VOC and Nox emission trends in Asian cities over 2005-2019 evaluated using satellite observations
12.14.21	Jake Gristey	Utilizing the Spectral Structure of Reflected Solar Radiation to Understand the Underlying Properties and Processes Controlling the Albedo of Earth
12.14.21	Pornampai Narenpitak	Free Tropospheric Mineral Dust and the Sugar-To-Flowers Trade Cumulus Transition, Precipitation, and Cold Pools
12.14.21	Takanobuu Yamaguchi	Geographically varying vertical enhancement for E3SM
12.14.21	Carsten Warneke	Atmospheric Impacts of Volatile Chemical Products (VCP) Emissions on Air Quality in Major U.S. Cities
12.15.21	Chelsea Stockwell	Evaluation of biomass burning inventories using total carbon emission rates estimated from in situ measurements for FIREX-AQ 2019 Western Wildfires

12.15.21	Kai-Lan Chang	Impact of the COVID-19 economic downturn on tropospheric ozone trends: an uncertainty weighted data synthesis for quantifying regional anomalies above western North America and Europe
12.15.21	Elizabeth Asher	Pyrogenic perturbations to the stratospheric aerosol layer and subsequent climate impacts
12.15.21	Andrew Rollins	Detailed Airborne observations of the stratospheric plume from the 2019 eruption of Raikoke
12.15.21	Audrey Gaudel	Tropospheric Ozone Distribution and Trends in the Tropics
12.15.21	Claire Granier	session convenor
12.15.21	Lu Xu	Ozone Production from Wildfires during FIREX-AQ (invited)
12.15.21	Chuck Brock	Aerosol Optical Properties Derived from Global-Scale In Situ Measurements
12.15.21	Steven Brown	Halogen Chemistry in Fire Plumes: Aircraft Observations from FIREX-AQ 2019
12.15.21	Pam Rickly	Model evaluation of sulfate and HMS production from SO ₂ emissions measured during FIREX-AQ
12.15.21	Graham Feingold	Emerging approaches to assessing aerosol-cloud interactions in warm marine boundary layer clouds
12.15.21	Brian McDonald	Analyzing and modeling weekday and weekend ozone trends in the Los Angeles Basin
12.15.21	Aparajeo Chattopadhyay	Atmospheric Chemistry of Perfluoroheptenes (C ₇ F ₁₄): Isomer-specific OH Reactivity, Radiative Property, and Atmospheric Degradation Mechanism
12.15.21	Aaron Lamplugh	Positive matrix factorization analysis of VOC emissions in Boulder, CO during COVID-AQS 2020

12.15.21	Jeff Peischl	A comparison of ambient measurements of NO _x , CO, O ₃ , and PM _{2.5} during the COVID-19 pandemic with a climatological multiple linear regression model for various U.S. cities
12.15.21	Joshua Schwarz	Exploring the utility of longitudinal transects for sampling atmospheric plumes
12.15.21	Daniel Murphy	How do measurements of Single Particle Composition constrain Gas-Particle Exchange?
12.15.21	Brian McDonald	Developing Near Real-time Emissions over the US during the COVID-19 Pandemic
12.15.21	Megan Bela	Impact of FireLab/FIREX-AQ Fuel Burned Amounts and Emission Factors on Pyrogenic Ozone and Fine Particulate Matter Simulated by a Regional Chemical Model
12.15.21	Troy Thornberry	The Stratospheric Aerosol processes, Budget and Radiative Effects (SABRE) Airborne Science Mission
12.15.21	Colin Gurganus	Instrumental Challenges: In-situ stratospheric aircraft deployment of a commercial spectrometer instrument for Carbonyl Sulfide
12.15.21	Christopher Maloney	The Climate and Ozone Impacts of Black Carbon Emissions from Global Rocket Launches
12.15.21	Erik Larson	Aerosol impacts on stratospheric water variability
12.15.21	Owen Cooper	An update on variable and changing global tropospheric ozone trends
12.16.21	Jan Kazil	The Sugar-To-Flower Trade Cumulus Transition in a Future Climate (invited)

12.16.21	Jianhao Zhang	Albedo susceptibility of marine low-clouds: the role of covarying meteorological conditions
12.16.21	Chia-Hua Hsu	Assimilating remote sensing NO ₂ observations with WRF-Chem/DART for constraining Nox emissions and improving air quality forecasting over Colorado
12.16.21	<i>Henry Bowman</i>	<i>Analysis of Nitrous Oxide Emissions from Onroad Sources</i>
12.16.21	Ryuji Yoshida	An idealized 2-D Hadley circulation simulation for evaluation and improvement of physics schemes in high resolution global modeling
12.17.21	Siyuan Wang	Chemical heterogeneity in wildfire plumes: implications for large-scale air quality models and satellite retrievals
12.17.21	Rebecca Washenfelder	Brown Carbon Lifetime and Chemistry in Aged Wildfire Plumes from the Western U.S. (invited)
12.17.21	Jake Gristey	New Insights into Shortwave Radiative Effects at the Surface in Complex Cloud-Aerosol Environments using Large Eddy Simulation, 3D Radiative Transfer, and Machine Learning
12.17.21	Gordon Novak	Measurement and Model Evaluation of N ₂ O ₅ Heterogeneous Chemistry in the Upper Troposphere and Lower Stratosphere
12.17.21	Caroline Womack	Tropospheric Mid-Latitude Halogen-Induced Ozone Depletion Observed from an Industrial Source over the Great Salt Lake
12.17.21	Xiaoli Zhou	Sea surface temperature control on aerosol-induced marine cloud brightness over the North Atlantic Ocean-Implications for cloud feedback in a future warmer climate

Presentation Schedule 2021

Present former students/guests/employee of NOAA

Presentation Length (MST)	Session Time (MST)	Session Number	Session Title
MONDAY 12.13.21			
15:00-17:00	15:00-17:00	A15G-1730	Atmospheric Research Supported by Uncrewed Aerial Systems II
TUESDAY 12.14.21			
08:46-08:54	08:45-10:00	C22B-01	Advances in UAV Remote Sensing of the Cryosphere I
08:55-09:00	08:45-10:00	A22C-03	Emissions of Atmospheric Pollutants from Oil, Gas, and Coal Operations I
09:06-09:10	08:45-10:00	A22F-05	Numerical Coupling of Atmospheric Processes in Current and Future Models: Challenges and Paths Forward I
09:10-09:15	08:45-10:00	A22E-05	Novel (VOC) Emissions Sources: Observational Constraints and Advances in Understanding Atmospheric Reactivity I
12:05-12:10	11:45-13:00	A23H-05	Convection Processes and Their Environmental and Aerosol Interactions: Theory, Observation, and Modeling I
12:08-12:11	11:45-13:00	A23B-04	Atmospheric and Oceanic Processes Governing the Trade Wind Regions I
12:10-12:15	11:45-13:00	GC23C-05	The Flows of Energy through the Climate System I

12:37-12:42	11:45-13:00	A23F-10	Geostationary and Polar-Orbiting Satellite for Air Quality and Atmospheric Composition I
14:18-14:21	13:30-14:45	A24F-09	Lagrangian and Climatological Transitions of Warm Boundary Layer Clouds I
15:03-15:06	15:00-16:15	A25A-02	General Session: Atmospheric Chemistry and Composition VI
14:12-14:17	13:30-14:45	A24E-08	Geostationary and Polar-Orbiting Satellite for Air Quality and Atmospheric Composition II
15:00-16:15	10:00-16:15	A25S-16	Air Pollution, Greenhouse Gases, and Emissions in Asia and Their Interactions with the World III
16:00-18:00	16:00-18:00 CST	GC250-0812	The Flows of Energy through the Climate System III
15:00-17:00	15:00-17:00	A25C-1687	Atmospheric and Oceanic Processes Governing the Trade Wind Regions II
15:00-17:00	15:00-17:00	A25N-1856	Numerical Coupling of Atmospheric Processes in Current and Future Models: Challenges and Paths Forward II
15:00-17:00	15:00-17:00	A25M-1845	Novel (VOC) Emissions Sources: Observational Constraints and Advances in Understanding Atmospheric Reactivity II
WEDNESDAY 12.15.21			
07:05-07:10	07:00-08:15	A31E-02	Fire and Smoke: Biomass Burning Emissions, Chemical Evolution, and Impacts on Air Quality and Climate I

07:20-07:25	07:00-08:15	A31G-04	Tropospheric Ozone Trends in a Rapidly Changing World I
07:32-07:35	07:00-08:15	A31H-10	Stratospheric Gas and Aerosol Composition Change and Associated Impacts on Stratospheric Ozone and Climate III
07:23-07:26	07:00-08:15	A31H-07	Stratospheric Gas and Aerosol Composition Change and Associated Impacts on Stratospheric Ozone and Climate III
07:25-07:30	07:00-08:15	A31G-05	Tropospheric Ozone Trends in a Rapidly Changing World I
talks A32C 08:00-09:15	posters A35G 4:00-6:00	A32C & A35G	Emissions and Air Quality in Africa
08:45-08:50	08:45-10:00	A32E-01	Fire and Smoke: Biomass Burning Emissions, Chemical Evolution, and Impacts on Air Quality and Climate II
08:50-08:55	08:45-10:00	A32F-02	General Session: Atmospheric Physics, Radiation, Clouds, and Aerosol II
08:55-09:00	08:45-10:00	A32E-03	Fire and Smoke: Biomass Burning Emissions, Chemical Evolution, and Impacts on Air Quality and Climate II
9:00-9:05	08:45-10:00	A32E-04	Fire and Smoke: Biomass Emissions, Chemical Evolution, and Impacts on Air Quality and Climate II
11:45-11:50	11:45-13:00	A33F-01	Process-Oriented Analysis of Cloud and Precipitation Physics I
09:10-09:15	08:45-10:00	A32G-06	Tropospheric Ozone Trends in a Rapidly Changing World II
11:50-11:55	11:45-13:00	A33B-02	Laboratory Studies in atmospheric Sciences I
11:55-12:00	11:45-13:00	A33A-03	COVID-19 Lockdowns: What have we learned about Air Pollution and Carbon Emissions from local to Global Scale? I

12:00-12:05	11:45-13:00	A33A-04	COVID-19 Lockdowns: What have we learned about Air Pollution and Carbon Emissions from Local to Global Scale? I
12:12-12:15	12:45-14:00	A33G-10	Methodological Improvements in Fire and Smoke Exposure I
13:38-13:44	13:30-14:45	A34D-02	Stratospheric Gas and Aerosol Composition Change and Associated Impacts on Stratospheric Ozone and Climate II
14:05-14:10	13:30-14:45	A34B-08	COVID-19 Lockdowns: What have we learned about Air Pollution and Carbon Emissions from Local to Global Scale? II
15:00-17:00	15:00-17:00	A35J-1768	Stratospheric Gas and Aerosol Composition Change and Associated Impacts on Stratospheric Ozone and Climate IV
15:00-17:00	15:00-17:00	A35Q-1865	Stratospheric Gas and Aerosol Composition Change and Associated Impacts on Stratospheric Ozone and Climate IV
15:00-17:00	15:00-17:00	A35Q-1866	Stratospheric Gas and Aerosol Composition Change and Associated Impacts on Stratospheric Ozone and Climate IV
15:00-17:00	15:00-17:00	A35Q-1875	Stratospheric Gas and Aerosol Composition Change and Associated Impacts on Stratospheric Ozone and Climate IV
15:00-17:00	15:00-17:00	A35Q-1879	Stratospheric Gas and Aerosol Composition Change and Associated Impacts on Stratospheric Ozone and Climate IV
15:00-17:00	15:00-17:00	A35R-1887	Tropospheric Ozone Trends in a Rapidly Changing World III
THURSDAY 12.16.21			
07:00-07:05	07:00-08:15	A41B-01	Boundary Layer Clouds and Climate Change I

07:10-07:15	07:00-08:15	A41B-03	Boundary Layer Clouds and Climate Change I
13:55-14:00	13:30-14:45	GC44D-05	Global Challenges for Quantifying Air Pollutant and Greenhouse Gas Emissions II
<i>14:05-14:10</i>	<i>13:30-14:45</i>	<i>GC44D-07</i>	<i>Global Challenges for Quantifying Air Pollutant and Greenhouse Gas Emissions II</i>
15:00-17:00	15:00-17:00	A45K-1990	High-Resolution Earth System on Large Supercomputers II
FRIDAY 12.17.21			
07:20-07:25	07:00-08:15	A51B-05	Advances in Wildland-Fire/Atmosphere Interactions
12:10-12:15	11:45-13:00	A53D-06	Light-Absorbing Carbon Aerosol From Observations and Models I
14:18-14:25 CST	13:30-14:45	A54D-07	Light Scattering and Radiative Transfer: Basic Research and Applications I
15:00-17:00	15:00-17:00	A55J-1525	Atmospheric Oxidation Capacity Constraints: Laboratory Investigations, Field and Remote Sensing Observations, and Modeling Studies II
15:00-17:00	15:00-17:00	A55J-1532	Atmospheric Oxidation Capacity Constraints: Laboratory Investigations, Field and Remote Sensing Observations, and Modeling Studies II
15:00-17:00	15:00-17:00	A55K-1547	Boundary Layer Clouds and Climate Change II



Presentation Type	Room Number
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Poster	Convention Center Poster Hall, D-F
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Oral	Convention Center Rm 265-266
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Oral	Convention Center Rm 275-277
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Oral	Convention Center Rm 278-279
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Oral	Convention Center Rm 280-282
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Oral	online only
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Oral	Convention Center Rm 278-279
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Oral	Convention Center Rm 208-210
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Oral	Convention Center Rm 283-285
Oral	Convention Center Rm 278-279
eLightning	Convention Center eLightning Theater VI
Oral	Convention Center Rm 283-285
Poster	online only
Poster	
Poster	Convention Center Poster Hall, D-F
Poster	Convention Center Poster Hall, D-F
Poster	Convention Center Poster Hall, D-F
Oral	Convention Center New Orleans Theater C

Oral	Convention Center Rm 283-285
eLightning	Convention Center eLightning Theater VII
eLightning	Convention Center eLightning Theater VII
Oral	Convention Center Rm 283-285
Oral & Poster	Convention Center
Oral	Convention Center New Orleans Theater C
Oral	Convention Center Rm 294-296
Oral	Convention Center New Orleans Theater C
Oral	Convention Center, New Orleans Theater C
Oral	online only
Oral	Convention Center Rm 283-285
Oral	Convention Center Rm 278-279
Oral	Convention Center Rm 275-277

Oral	Convention Center Rm 282-285
Oral	online only
<i>Oral</i>	<i>online only</i>
Poster	Convention Center Poster Hall, D-F
Oral	Convention Center Rm 275-277
Oral	Convention Center Rm 278-279
Oral	Convention Center Rm 278-279
Poster	Convention Center Poster Hall, D-F
Poster	Convention Center Poster Hall, D-F
Poster	Convention Center Poster Hall, D-F